

From: [Sivak, Michael](#)
To: [Mishkin, Katherine](#)
Subject: RE: Technical Memorandum on Candidate Technologies Review Request
Date: Monday, April 13, 2015 9:37:00 AM

Vacations are the best!!!!!!

Michael Sivak

212.637.4310

From: Mishkin, Katherine

Sent: Monday, April 13, 2015 9:28 AM

To: Sivak, Michael

Subject: RE: Technical Memorandum on Candidate Technologies Review Request

It was really great. The warm mediterrean weather was a great break from New York. Naomi had so much fun with her cousins and it was great catching up with everyone. I could get used to being on vacation☺

Katie

Katherine Ryan Mishkin

Geologist

Superfund Technical Support Section

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From: Sivak, Michael

Sent: Monday, April 13, 2015 9:21 AM

To: Mishkin, Katherine

Subject: RE: Technical Memorandum on Candidate Technologies Review Request

Good! How was Israel?

Michael Sivak

212.637.4310

From: Mishkin, Katherine

Sent: Monday, April 13, 2015 9:01 AM

To: Sivak, Michael

Subject: RE: Technical Memorandum on Candidate Technologies Review Request

Yes, I'll be there but won't be staying at the hotel, unfortunately. See you there and probably before.

Katie

Katherine Ryan Mishkin

Geologist

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From: Sivak, Michael

Sent: Monday, April 13, 2015 8:59 AM

To: Mishkin, Katherine

Subject: RE: Technical Memorandum on Candidate Technologies Review Request

I already sent the info to Tanya, and she told me she already knew it, so there's no need to re-send it.

Yes, I'll be in Philly – will you?

Welcome back!!!

Michael Sivak

212.637.4310

From: Mishkin, Katherine

Sent: Monday, April 13, 2015 8:56 AM

To: Sivak, Michael

Subject: RE: Technical Memorandum on Candidate Technologies Review Request

Thanks, Michael. That makes sense. I suppose it's the FS Tech memo where they should be included.

I can pass that info on to Tanya if she hasn't provided the comments to Arcadis yet.

Will you be at the D&C conference later this week?

Katie

Katherine Ryan Mishkin

Geologist

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From: Sivak, Michael

Sent: Friday, April 03, 2015 2:05 PM

To: Mishkin, Katherine

Subject: RE: Technical Memorandum on Candidate Technologies Review Request

Katie,

I talked to John Prince about the question of whether or not RAOs should be included in a candidate technologies memo. He said that it could go either way. If the RAOs have been developed, they can be included, but if they haven't been developed yet, it's no big deal. The purpose of this document is simply a laundry list of potential technologies that may potentially be able to treat the contamination in the media of concern. It's the next deliverable (and I can't remember the name, sorry) that starts to whittle down the list to focus on those technologies that might actually work and will be further evaluated in the FS.

Does that make sense?

Michael Sivak

212.637.4310

From: Mishkin, Katherine

Sent: Tuesday, March 31, 2015 1:54 PM

To: Mitchell, Tanya

Cc: Sivak, Michael; Metz, Chloe; Clemetson, Michael

Subject: RE: Technical Memorandum on Candidate Technologies Review Request

Hi Tanya,

I've reviewed the Tech Memo on the Candidate Technologies for Rolling Knolls. Considering that this document will require modification following the risk characterization from the BHHRA and SLERA and that they are not yet considering technologies for sediments and surface water, I kept my review pretty general for now. However, I have provided a few comments that they should consider moving forward. Please let me know if you have any questions.

General Comments:

- 1) Technology considerations for surface water and sediments are not included in this document. Since one of the conclusions made in this report is that surface water and sediments are not impacted, it is unclear if these technologies will be considered with an update following risk characterization from the BHHRA and SLERA. Additionally, it should be noted that there were several COCs showing exceedences of the sediment and surface water ecological screening criteria, so it is unclear why conclusions are being made in the first place that the water quality of the surface water bodies is not being degraded by the landfill.
- 2) Since this document does not include proposed Remedial Action Objectives, it is not entirely clear how each technology would address potential goals that will ultimately be developed for the site. It is recommended that RAOs are proposed and evaluated by EPA before moving forward with further technology screening.
- 3) Overall, this memorandum needs to be updated with the new data that were collected during the data gap analysis and the conclusions should be updated accordingly.

Specific Comments:

Page 9, Section 2.3 Investigative History, 1st bullet, last sentence: This sentence indicates that the area impacted by dichlorodifluoromethane is considered localized, but it should be noted that this is also a data gap that is being addressed since we do not yet have an understanding for the extent of contamination. Thus, it is premature to characterize the extent of impact by this VOC. Please update.

Page 10, Section 2.3 Investigative History, last bullet: In this paragraph it states that the water quality in surface-water bodies adjacent or downgradient of the landfill has not been degraded by water from the landfill; however surface water and sediments collected in surface water bodies indicates COCs are exceeding ecologically-based screening levels. Thus, it is unclear why this statement is being made and should be updated accordingly.

Table 2. Preliminary Screening of Remedial Technologies – Soil: The description of in-situ chemical treatment for solidification/stabilization only includes the use of cement. However, it should be noted that there are other agents that can be used to stabilize metals. They aren't considering in-situ oxidation/reduction, precipitation/coprecipitation. This is when the use of a chemical oxidant can convert an inorganic contaminant to a less mobile form. This form of in-situ chemical treatment should be considered in the preliminary screening evaluation.

Table 4 and Table 5 - Process Options Screening for Soil and Groundwater: These tables demonstrate which technologies have been retained versus those that have been screened out.

However, in the last column, the rationale is often unclear in terms of why a certain technology has not been retained. For example, “less effective than other remedial technologies” is often used as the rationale, but this is too vague. It is recommended that additional rationale is provided to clarify why technologies are not being retained.

Katie

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From: Mitchell, Tanya

Sent: Wednesday, March 18, 2015 1:40 PM

To: Mishkin, Katherine; Ferreira, Steve; Sivak, Michael; Clemetson, Michael

Subject: FW: Technical Memorandum on Candidate Technologies Review Request

Hello All,

Please find attached the revised draft Technical Memorandum on Candidate Technologies. Your review is requested. Any comments or edits are **requested by April 8, 2015**. Please use the following format for your comments.

Section 3.7.1 Description, paragraphs 3 and 4:

Should you have any questions regarding this email or cannot make the requested date for comments, please feel free to give me a call.

Regards,

Tanya
212 637-4362